CLAIMS:

1. A solid electrolytic capacitor comprising:

at least one solid electrolytic capacitor component comprising a foil-like valve metal substrate formed with an insulating oxide film on the surface thereof, a valve metal body whose one end portion region is bonded to one end portion region of opposite end portion regions of the foil-like valve metal substrate so that electric connection can be established between valve metals;

a conductive metal substrate whose one end portion region is bonded to the other end portion region of the opposite end portion regions of the foil-like valve metal substrate so that electric connection can be established between metals;

and an anode electrode formed by sequentially forming at least a solid high molecular polymer electrolyte layer and a conductive layer on the foil-like valve metal substrate.

2. A solid electrolytic capacitor in accordance with Claim 1 wherein a plurality of solid electrolytic capacitor components are disposed independent of each other on a lead frame, conductive layers each provided in one of the solid electrolytic capacitor components are electrically connected with each other by the lead frame and a part of a cathode lead electrode is drawn out from one surface of a region where the lead frame and the conductive layers of the solid electrolytic capacitor components intersect with each other in a direction perpendicular to the one surface of the region.

3. A circuit board having a built-in solid electrolytic capacitor comprising:

at least one solid electrolytic capacitor component having a foil-like valve metal substrate, a valve metal body whose one end portion region is bonded to each of one opposite end portion regions of the foil-like valve metal substrate so that electrical connection can be established between the valve metals;

a conductive metal substrate whose one end portion region is bonded to the other end portion region of the foil-like valve metal substrate so that electrical connection can be established between the metals and a cathode electrode formed by sequentially forming at least a solid high molecular polymer electrolyte layer and a conductive layer on the foil-like valve metal substrate;

the at least one solid electrolytic capacitor component being mounted on one surface of a first insulating substrate formed with at least one wiring pattern so as to electrically connect with the wiring pattern and being accommodated within a substantially closed space defined by the first insulating substrate;

and a second insulating substrate facing the first insulating substrate and formed with at least one wiring pattern.

4. A circuit board having a built-in solid electrolytic capacitor in accordance with Claim 3, wherein a plurality of solid electrolytic capacitor components are disposed independent of each other on the first insulating substrate, conductive layers each provided in one of the solid electrolytic capacitor components are electrically connected with each other by the corresponding wiring pattern and a part of the wiring pattern is drawn out from one surface of a region where the wiring pattern and the conductive layers of the solid electrolytic capacitor components intersect with each other in a direction perpendicular to the

one surface of the region so as to pass through the first insulating substrate.

5. A method for manufacturing a solid electrolytic capacitor comprising steps of:

bonding one end portion region of a valve metal body to one of two opposite end portion regions of a foil-like valve metal substrate formed with an insulating oxide film so that electric connection can be established between the valve metals;

bonding one end portion region of a conductive metal substrate to the other end portion region so that electric connection can be established between the metals to fabricate an electrode body for a solid electrolytic capacitor component;

masking, of the whole electrode body, a part of the valve metal body and the entire conductive metal substrate bonded to the valve metal body;

dipping, of the whole electrode body, the whole foil-like valve metal substrate, the entire masked portion and a part of the valve metal body which is not masked in a forming solution, applying voltage to the electrode body to effect anodic oxidization thereon and form an insulating oxide film at least at an edge portion of the foil-like valve metal substrate;

forming a solid high molecular polymer electrolyte layer on the substantially entire surface of the foil-like valve metal substrate;

and coating the solid high molecular polymer electrolyte layer with the conductive paste and drying the conductive paste to form a conductive layer.

6. A method for manufacturing a circuit board having a built-in solid electrolytic capacitor comprising steps of:

bonding one end portion region of a valve metal body to one of two opposite end portion regions of a foil-like valve metal substrate formed with an insulating oxide film so that electric connection can be established between the valve metals;

bonding one end portion region of a conductive metal substrate to the other end portion region so that electric connection can be established between the metals to fabricate an electrode body for a solid electrolytic capacitor component;

masking, of the whole electrode body, a part of the valve metal body and the entire conductive metal substrate bonded to the valve metal body;

dipping, of the whole electrode body, the whole foil-like valve metal substrate, the entire masked portion and a part of the valve metal body which is not masked in a forming solution, applying voltage to the electrode body to effect anodic oxidization thereon and form an insulating oxide film at least at an edge portion of the foil-like valve metal substrate;

forming a solid high molecular polymer electrolyte layer on the substantially entire surface of the foil-like valve metal substrate;

coating the solid high molecular polymer electrolyte layer with the conductive paste and drying the conductive paste to form a conductive layer;

mounting at least one solid electrolytic capacitor thus fabricated on one surface of a first insulating substrate formed with at least one wiring pattern so as to electrically connect with the wiring pattern;

and accommodating the solid electrolytic capacitor within a

substantially closed space defined by the first insulating substrate and a second insulating substrate facing the first insulating substrate and formed with at least one wiring pattern.